## ABSTRACT

The invention involves a novel method and structure for utilizing homeotropic vertically aligned nematic liquid crystal cells in the production of high contrast microdisplays. Two circular polarizers are used in order to propagate circularly polarized, rather than planar polarized, light through a liquid crystal cell. The use of circularly polarized light eliminates the liquid crystal director alignment requirements for the transmittance of light necessary for planar polarized light. With no director alignment requirement, it is possible to use perfectly homeotropic vertically aligned nematic cells irrespective of domain size and shape because fringing field induced director tilt will not decrease the transmittance of the liquid crystal cell.

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